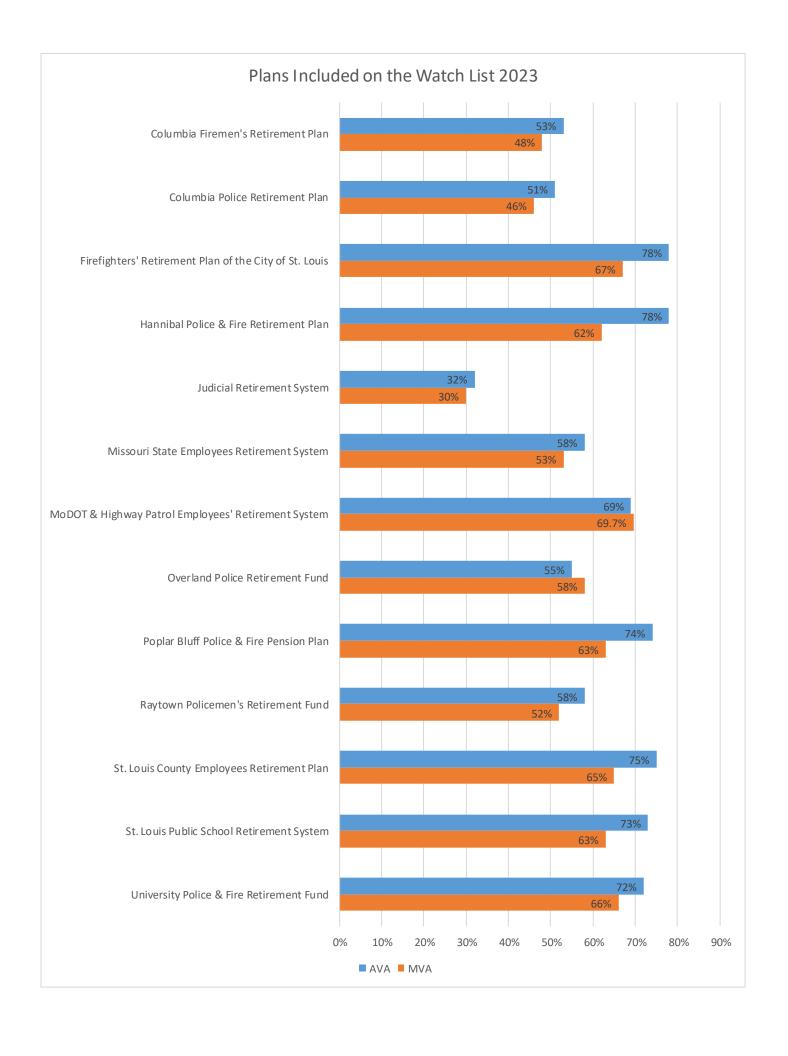


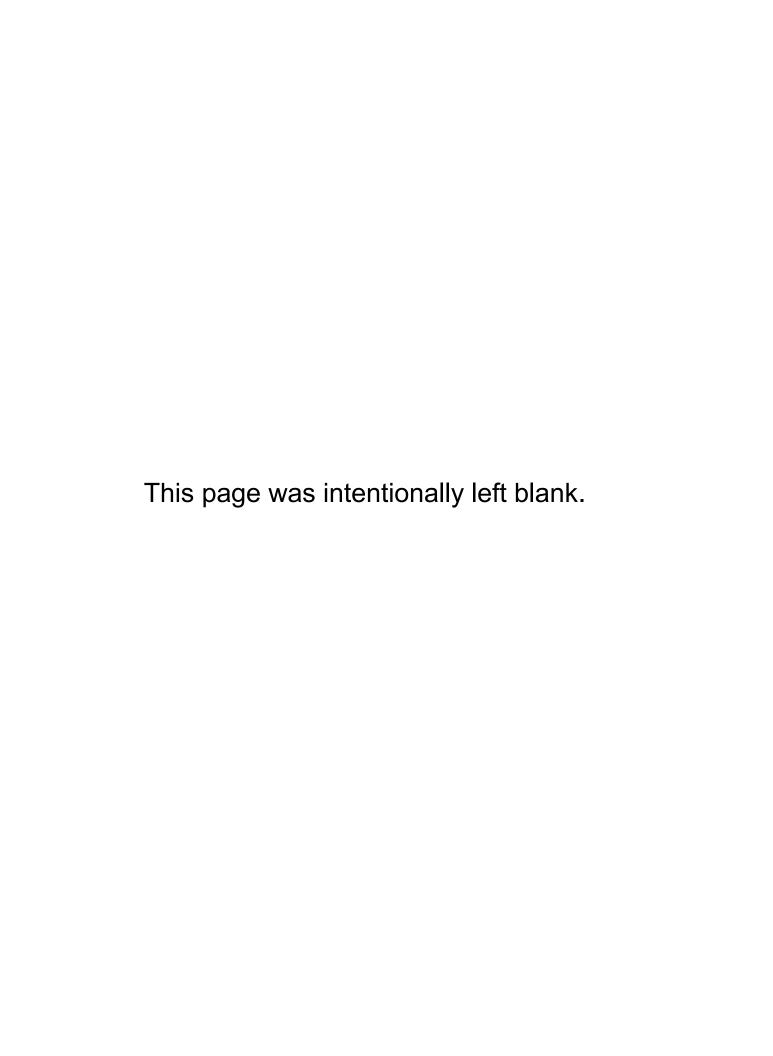
JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

2023 ANNUAL WATCH LIST

Presented on December 1, 2023

Please Note: For purposes of the Watch List, the term "inactive" includes terminated vested, retired, surviving beneficiary, disabled members, and for some plans, terminated nonvested members who have not withdrawn employee contributions.

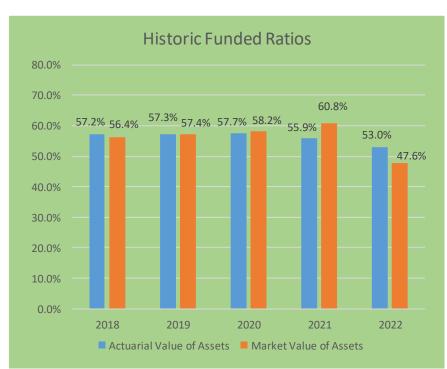




COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

- The Fire and Police plans are commingled for investment purposes. For the year ended 9/30/22, the rate of return on investments equaled –15.5% (Market) & 3.2% (Actuarial) vs. 6.25% assumed which was changed from 7.0%.
- The employer continues to meet or exceed the ADC. The actuary notes that "For the continued well-being of the fund, the fund must receive contributions at least at the levels recommended in the actuarial valuation."
- In the past 13 years, the City has twice reset the amortization period. First, for the 2010 valuation, the City changed the amortization period from 17 years to 29 years. Second, for the 2016 valuation, the City changed the amortization period from 23 years to 30 years. As of the 9/30/22 valuation, 24 years remain. On page A-13 of the valuation, the actuary comments that "Periods above 17 to 24 years generally indicate that the UAAL payment is less than the interest in the UAAL. This situation is referred to as 'negative amortization.' Negative amortization is increasingly viewed as undesirable." On page A-9, the actuary expects that "in nominal dollars, the UAAL is expected to increase until the amortization period becomes approximately 24 years, at which point it would be expected to decline..."
- A new tier of provisions were passed for employees hired on or after October 1, 2012. These provisions include, but are not limited to, modified age and service requirements for retirement eligibility, modified benefit multiplier with no retiree COLA, fire member contribution reduced to 4% of pay, and automatic survivor benefit replaced with a survivor option at retirement with member's reduced benefit. The actuary notes that "the normal cost decreased as more active members came into the post October 1, 2012 benefit plan."
- Fire employees contribute 16.32% of pay (4% for those hired on/after 10/01/12) and do not participate in Social Security. Police employees contribute between 7.45% & 8.35% of pay (4.5% for those hired on/after 10/01/12) & do participate in Social Security.

FIREMEN'S RETIREMENT FUND



Year Ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2022	\$6,962,552	\$6,962552	100%
2021	\$6,619,098	\$6,619,098	100%
2020	\$5,965,276	\$5,965,276	100%
2019	\$5,306,842	\$5,306,842	100%
2018	\$5,426,042	\$5,426,042	100%

Fire as of 9/30/22

 Market Value:
 \$93,441,891

 Actuarial Value:
 \$104,946,213

 Liabilities:
 \$196,267,635

Membership:

Active: 143 Inactive: 182

Normal Retirement Formula:

3.5% of compensation for the first 20 years + 2% for the next 5 years. Max of 80% of compensation.

Hired on/after 10/1/12: 2.5% of compensation times years of service. No max benefit.

Normal Retirement Eligibility:

Age 65 or 20 years of service

Hired on/after 10/1/12: Age 55 with 1 year of service. Rule of 80.

COLA Annual Minimum: 2%

Social Security Coverage: No

Assumed Rate of Return: 6.25%

Wage Inflation: 2.75%

COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS (Continued)

POLICE RETIREMENT SYSTEM

Police as of 9/30/22

Market Value: \$56,039,334 Membership: Assumed Rate of Return: 6.25%

Actuarial Value: \$62,938,750 **Active**: 153 **Salary**: 2.75%

Liabilities: \$122,839,201 Inactive: 228 Social Security Coverage: Yes

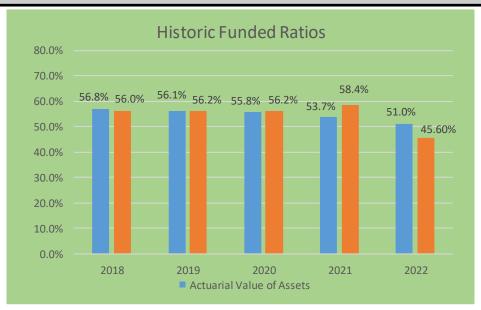
Normal Retirement Formula: 3% of Compensation for the first 20 years of service plus 2% of compensation for the next 5 years of service. Max: 70% of compensation with 25 years of service.

Hired on/after 10/1/12: 2% of compensation for the first 25 years of service plus 1.5% of compensation for each year over 25. Max of 57.5% of compensation.

Normal Retirement Eligibility: 20 years of service or age 65. **Hired on/after 10/1/12**: 25 years of service or age 65.

COLA: Annual increase of 0.6%. **Social Security:** Yes

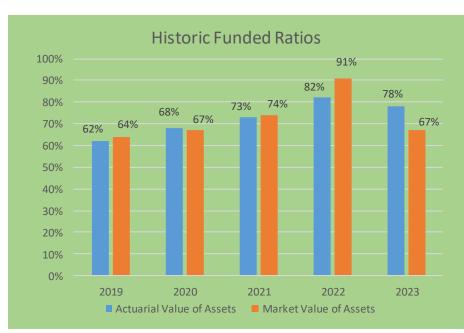
Wage Inflation: 2.5%



Year ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2022	\$4,345,411	\$4,345,411	100%
2021	\$4,280,243	\$4,280,243	100%
2020	\$4,159,256	\$4,159,256	100%
2019	\$4,019,648	\$4,019,648	100%
2018	\$3,796,494	\$3,796,494	100%

FIREFIGHTERS' RETIREMENT PLAN OF THE CITY OF ST. LOUIS

- Rate of return on investments equaled –18.74% (Market) and 4.77% (Actuarial) vs. 7.0% assumed.
- RP 2014 Blue Collar Generational Adjusted to 2006 scale MP-2017.
- Per the actuary "The unfunded actuarial liability increased from \$27.6 million on October 1, 2021 to \$40.9 million on October 1, 2022. The unfunded actuarial liability would have been \$33.2 using the prior assumptions. Therefore, the increase in the unfunded actuarial liability was \$7.7 million due to the change in assumptions."
- Also per the actuary "During the year ended September 30, 2022, the Plan's assets earned -18.90% (net of investment expenses) on a market value basis, however due to smoothing of prior investment gains and losses, the return on the actuarial asset value was 4.77% (as compared to 7.0% assumed for the period ending September 30, 2022). This resulted in an actuarial loss on investments of \$3.2 million."



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2022	\$7,885,680	\$7,885,680	100%
2021	\$8,606,861	\$8,606,861	100%
2020	\$8,583,020	\$8,583,020	100%
2019	\$8,995,724	\$8,995,724	100%
2018	\$8,022,794	\$8,022,794	100%

As of 9/30/22

Market Value: \$122,627,294 Actuarial Value: \$141,968,918

Liabilities: \$182,867,175

Membership:

Active: 624 Inactive: 171

Normal Retirement Formula: 2% of compensation for the first

25 years of service + 2.5% (5% for grandfathered participants) of compensation in excess of 25 years of service Maximum: 75% of

average final compensation.

Normal Retirement Eligibility: Age 55 with 20 years of service.

Social Security Coverage: No

COLA: 1.5-5%

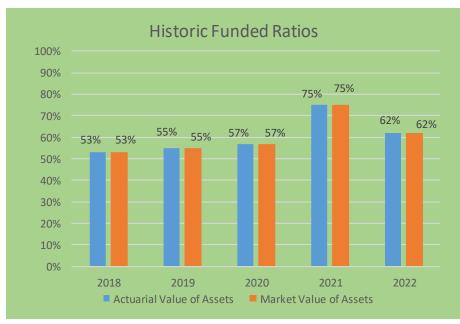
Assumed rate of return: 7.00%

(previously 7.25%)

Wage Inflation: 2.75%

HANNIBAL POLICE & FIRE RETIREMENT PLAN

- Rate of return on investments equaled –12.5% (Market) vs. 7% assumed.
- Mortality Table: Public Safety 2010 using scale MP-2021
- Per the actuary "The Plan's annualized investment return over the year preceding the valuation was -12.5%, producing a loss of almost \$4.98 million compared to our assumption that the assets will return 7%. Because we've switched the asset valuation method to remove the four-year smoothing of gains and losses, the entire amount of these losses is recognized in the current valuation."
- Also per the actuary "Large asset losses from the prior year and the removal of asset smoothing caused the funded ratio to drop to 62.1%. If the four-year smoothing of assets had been retained, the funded ratio would have been 65.1%. Since the plan document requires contributions to remain at a level percentage of covered compensation until the plan reaches a funded ratio of 80%, the removal of the asset smoothing method did not affect the required contributions for the coming year. "



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2022	\$1,242,940	\$1,520,789	122%
2021	\$1,286,444	\$1,492,927	116%
2020	\$1,331,470	\$1,424,566	107%
2019	\$1,378,071	\$1,364,514	99%
2018	\$1,426,304	\$1,298,013	91%

As of 9/30/22

Market Value: \$21,982,401

Actuarial Value: \$21,374,686

Liabilities: \$35,379,702

Membership:

Active: 69 Inactive: 74

Normal Retirement Formula:

65% of compensation for first 25 years of service + 1% for next 5 years of service. Maximum: 70% of compensation.

Normal Retirement Eligibility:

25 years of service. If hired on/after 7/1/07: 25 years of service with a minimum age of 55.

Social Security Coverage: No

COLA: Eliminated, 13th check may be issued if plan is at least 70% funded.

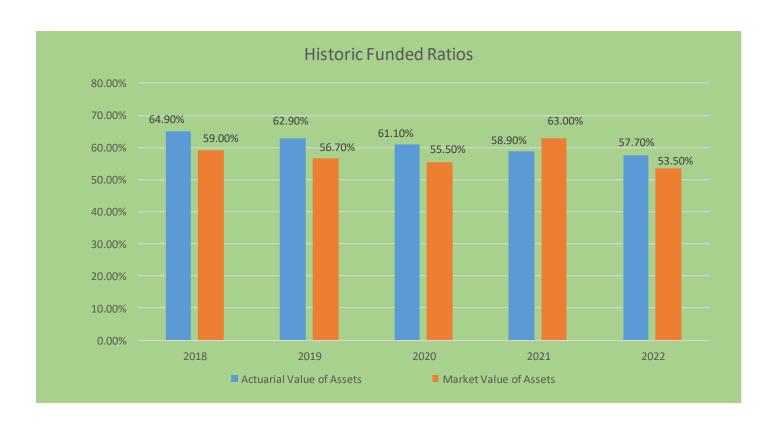
7070 Iuliucu.

Assumed rate of return: 7.0%

Wage Inflation: 3.5%

MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

- For the year ending June 30, 2022, rate of return on investments equaled –9.0% (market) and 5.1% (actuarial) vs. 6.95% assumed.
- The actuary completed a five-year experience study for the period 7/1/15—6/30/20. The board adopted changes to actuarial assumptions and methods including, but not limited to: increasing the individual salary growth assumption to partially reflect higher merit salary increases, updating mortality tables to Pub-2010 General Employees with a 75% generational projection, updating the retirement and termination assumptions, and modifying the length of future layers used to amortize actuarial gains/losses from 30 years to 25 years.
- The employer contribution rate as a percent of payroll increased from 26.33% for FY23 to 27.26% for FY24.
- One factor that affected the actuarially determined contribution rate was a decline in active membership of 2.9% from 42,829 as of 6/30/21 to 41,595 as of 6/30/22. This decrease resulted in covered payroll remaining relatively flat from the prior year. Active membership has declined about 26% over 18 years from 55,914 actives in 2004 to 41,595 in 2022.
- In 2018, the Board adopted a new investment portfolio asset allocation with a planned 36 month transition period. The board completed the transition ten months ahead of schedule in February 2021.
- Effective 6/30/18, the Board modified the asset smoothing method from an open five-year period to a closed five-year period. Existing unrecognized investment experience as of 6/30/18 will be recognized over a closed seven-year transition period beginning 6/30/18.
- New tier provisions were passed in 2010 requiring increased age and service requirements, as well as employee contributions of 4% for employees hired for the first time on or after 01/01/11. The number of active members covered by the 2011 tier increased from 22,369 (6/30/21) to 23,304 (6/30/22) and the percentage of members covered by MSEP 2011 increased from 52% to 56%. The actuary writes that "Because the benefit structure is different for MSEP 2011 members...the ongoing cost of the System declines as a larger percentage of active members are covered by MSEP 2011."



Year End- ing 6/30	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2022	\$471,302,256	\$471,302,256	100%
2021	\$463,293,368	\$463,293,368	100%
2020	\$436,895,653	\$436,895,653	100%
2019	\$394,150,042	\$394,150,042	100%
2018	\$379,557,962	\$379,557,962	100%

The actuary writes that the "actuarial assumptions have been changed eight times in the last ten years, resulting in an ultimate reduction in the investment return assumption from 8.5% in the 2011 valuation to 6.95% in the 2020 valuation." In addition, the unfunded portion of the actuarial accrued liability has increased during this time. These changes in assumptions have had the general effect of decreasing the plan's funded ratio.

As of 6/30/22

 Market Value:
 \$9,519,930,080

 Actuarial Value:
 \$8,894,328,756

 Liabilities:
 \$15,408,995,032

Active Members: 41,595

Inactive Members: 71,685

Normal Retirement Formula:

MSEP 2000: 1.7% of compensation times years of service plus 0.8% to age 62 (temp benefit under Rule of 80 or Rule of 90 for the 2011 Tier).

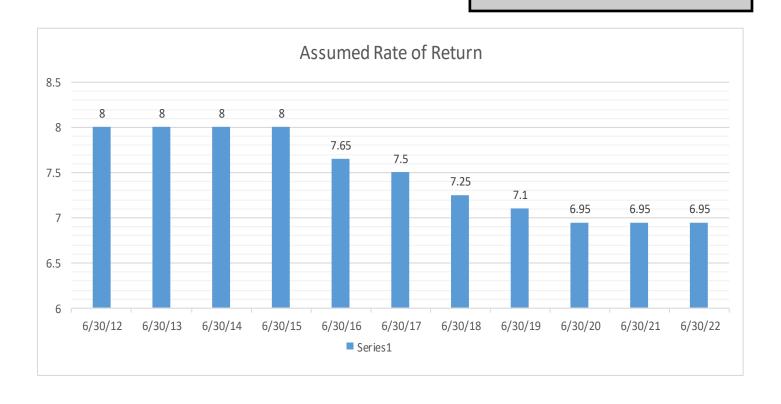
Normal Retirement Eligibility: Age 62 with 5 years of service or Rule of 80. 2011 Tier: Age 67 with 5 years of service or Rule of 90 with minimum age of 55.

Social Security Coverage: Yes

COLA: Annual Max 5%, 80% of CPI

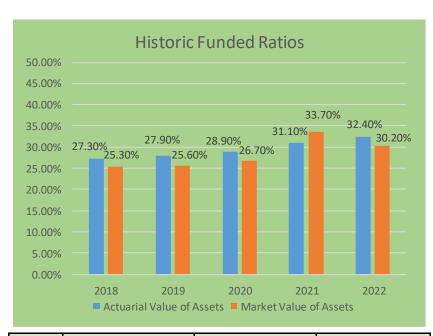
Assumed Rate of Return: 6.95%

Salary: 2.5%



JUDICIAL RETIREMENT PLAN

- For the year ending 6/30/22, investment return equaled -9.0% (Market) and 5.6% (Actuarial) vs. 6.95% assumed.
- The actuary completed a five-year experience study for the period 7/1/15—6/30/20. The Board adopted changes to actuarial assumptions and methods including, but not limited to: changing the individual salary increase assumption from age-based to 3%, updating mortality tables to Pub-2010 General Employees with a 75% generational projection, updating retirement and termination assumptions, eliminating the disability assumption, and modifying the length of future layers used to amortize actuarial gains/losses from 30 years to 25 years.
- Effective 6/30/18, modified the asset smoothing method from an open five-year period to a closed five-year period. Existing unrecognized investment experience as of 6/30/18 will be recognized over a closed seven-year transition period beginning 6/30/18.
- New tier provisions were passed in 2010 requiring increased age and service requirements as well as employee contributions of 4% for judges serving for the first time on or after 1/01/11.
- The number of active members covered by the 2011 tier increased from 252 in the prior year's valuation to 263. The percentage of judges covered by the 2011 tier increased from 60% to 63%. As more judges begin serving under the 2011 tier, normal cost will decrease.
- Prior to 1998, the plan was funded on a pay-as-you-go basis so no pre-funding occurred.
 When funding on an actuarial basis began, the funded ratio was at 0%.



FY End- ing 6/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUT- ED
2022	\$39,228,848	\$39,228,848	100%
2021	\$39,996,509	\$39,996,509	100%
2020	\$39,174,515	\$39,174,515	100%
2019	\$38,604,668	\$38,604,668	100%
2018	\$36,892,203	\$36,892,203	100%

As of 6/30/22

 Market Value:
 \$190,449,086

 Actuarial Value:
 \$203,997,065

 Liabilities:
 \$630,043,013

Membership:

Active: 415 Inactive: 623
Normal Retirement Formula:

50% of compensation. Less than service requirement=pro-rated benefit based on service

Normal Retirement Eligibility:

Age 62 with 12 years of service

Age 60 with 15 years of service

Age 55 with 20 years of service

Serving for the first time on/after 1/1/11:

Age 67 with 12 years of service Age 62 with 20 years of service

Social Security Coverage: Yes

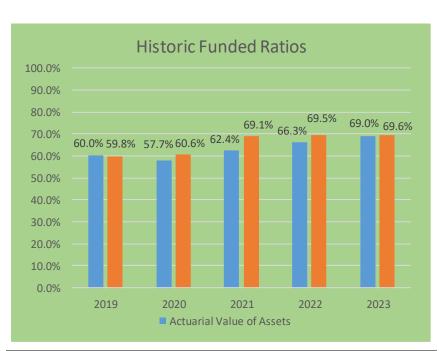
COLA: Annual max 5%, 80% CPI

Assumed rate of return: 6.95%

Salary: 3%

MoDOT & HIGHWAY PATROL EMPLOYEES' RETIREMENT SYSTEM (MPERS)

- Rate of return on investments equaled 8.9% (Market) and 12.85% (Actuarial) vs. 6.5% assumed as of 6/30/23.
- The Board of Trustees' actuary performed a review of economic assumptions (between experience studies) and lowered the assumed rate of return for investments from 7% to 6.5%. The next experience study is scheduled to be performed after the 6/30/22 actuarial valuation. Completed a 5-year experience study for the period July 1, 2012 to June 30, 2017 after which the Board adjusted both economic and demographic assumptions.
- The Board retained a governance consultant, which completed a review of board governance policies. The actuary continues to recommend that economic assumptions be reviewed annually in light of changes in actuarial standards and changes in forecasts of future economic conditions.
- New tier provisions were passed in 2010 requiring increased age and service requirements and an employee contribution rate of 4% of pay for employees hired for the first time on or after 01/01/11. As of 6/30/22, 3,331 active members were covered under the 2011 tier (an increase from 3,280 as of 6/30/21).
- In 2009, the actuary presented a temporary accelerated amortization schedule in accordance with section 105.684. As of 6/30/22 valuation, the plan uses a closed 2-year amortization period for unfunded retiree liabilities and a closed 13-year amortization period for the remaining unfunded liabilities (for the plan year beginning 7/1/23).
- In September 2014, the Board established a "rate stabilization reserve fund" from experience gains to attempt to maintain the employer contribution rate at or close to its current level (58% of covered payroll).



Year Ending June 30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2023	\$232,813,995	\$232,813,995	100%
2022	\$212,711,117	\$212,711,117	100%
2021	\$208,212,848	\$208,212,848	100%
2020	\$210,871,852	\$210,871,852	100%
2019	\$210,166,927	\$210,166,927	100%
2018	\$204,955,180	\$204,955,180	100%

As of 6/30/23

Market Value:\$3,247,983,333Actuarial Value:\$2,925,561,398Liabilities:\$4,665,012,389

Membership:

Active: 6,621 Inactive: 11,843

Normal Retirement Formula:

Year 2000 Plan: 1.7% of compensation times years of service plus 0.8% to age 62 (temporary benefit under rule of 80 or rule of 90 for the 2011 Tier)

Normal Retirement Eligibility:

Age 62 with 5 years of service or rule of 80. Uniformed Patrol: Mandatory retirement at age 60. Rule of 80 with minimum age of 48.

Hired for the first time on/after 1/1/11: Age 67 with 5 years of service or Rule of 90 (age 55). Uniformed Patrol: Age 55 with 5 years of service. Mandatory retirement at age 60.

Social Security Coverage: Yes

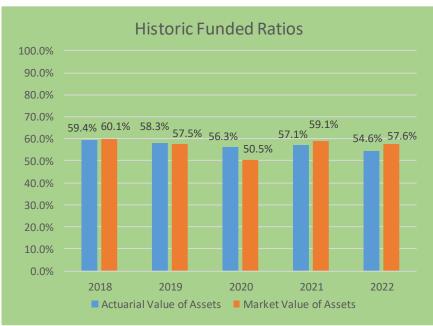
COLA: Annual Max 5%; 80% of CPI

Assumed rate of return: 6.5%

Wage Inflation: 3%

OVERLAND POLICE RETIREMENT FUND

- Rate of return on investments equaled 2.6% (Market) and 9.1% (Actuarial) vs. 6.75% assumed.
- Updated mortality tables to Pub-2010 Safety.
- In November 2020, the City Council increased employee contributions for lieutenants and captains to 8.5%. As part of the collective bargaining agreement approved in November 2018, the employee contribution rate for sergeants, corporals and police officers is now 9.4%.
- The City Council adopted three changes to the plan in 2017: increased employee contributions from 5% to 7.5%, phased out a retroactive COLA for certain members, and changed the refund of employee contributions upon retirement provision so employee contributions made after April 1, 2017 will not be refunded upon retirement.
- The employer contribution was supported by a tax levy of \$0.12 that had been insufficient to meet the ADC since 2008. In August 2017, the voters approved a tax levy increase. The current City tax rates are \$0.20 residential, \$0.33 commercial, \$0.367 personal. The actuary writes "These were recently increased...but are still below the actuarially determined rate." The actuarially determined tax rate increased from \$0.514 as of 4/20/20 to \$0.495 as of 4/1/21.
- The City made multiple changes to actuarial assumptions in 2014 based on the results of a five-year experience study, including lowering the assumed rate of return from 7.5 to 7.0 and again lower to 6.75 in 2021 as well as updating mortality tables.



Year Ending 3/31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2022	\$1,353,069	\$774,329	57%
2021	\$1,232,850	\$683,592	55%
2020	\$1,203,306	\$712,577	59%
2019	\$1,117,425	\$680,159	61%
2018	\$1,091,236	\$553,559	51%
2017	\$1,136,068	\$233,363	21%

As of 4/1/22

Market Value: \$15,176,281

Actuarial Value: \$14,380,146

Liabilities: \$26,330,607

Membership:

Active: 43 Inactive: 44

Normal Retirement Formula:

2.5% of compensation for the first 20 years of service plus 1.5% of compensation for each of the next 10 years of service.

Normal Retirement Eligibility:

20 years of service or Age 62 with 18 years of service or SSA full retirement age with 5 years of service.

Social Security Coverage: Yes

COLA: Annual Max 3%; 60% of

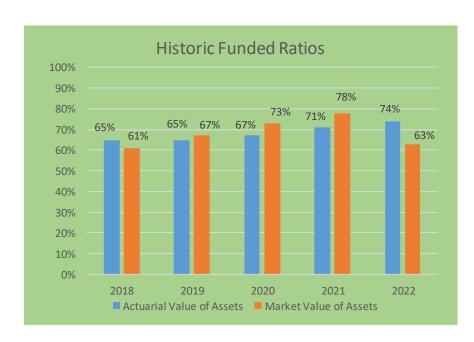
CPI

Assumed Rate of Return: 6.75%

Salary: 3.5%

Poplar Bluff Police & Fire Pension Plan

- Rate of return on investments equaled -18.63% (Market) vs. 5.5% assumed.
- Per the actuary "During the last year, you plan experienced an actuarial loss of \$721,631. This loss was due to: A) Contributions for the prior year less than the 2022 actuarial determined contribution, B) The asset return for the prior year was less than last year's assumed interest rate, C) Salary increases were larger than expected.
- The City has not contributed 100% of the ADC beginning with plan year 2012. The actuary comments that
 "Over the years, the plan sponsor has been contributing 30-50% of the ADC. This contribution policy will likely not be enough to cover future benefit obligations and ADC is likely to increase with each year the contribution is under 100%."
- Prior to the 1/1/19 valuation, the plan's actuary conducted a comprehensive review of assumptions. Effective with the 1/1/19 valuation, the following assumptions were changed: increased the assumed rate of return from 5 to 5.25, increased inflation assumption from 2 to 2.25, and updated mortality tables.
- Effective with the January 1, 2015 actuarial valuation, the cost method was changed from the Aggregate method to the Entry Age Normal cost method with a 20-year amortization period for unfunded liabilities. Initial UAAL as of 1/1//15 will be amortized over a closed 20 year period. Subsequent gains and losses are amortized over 15 year periods.



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBU- TION*	PERCENT CONTRIBUTED
2022	\$859,094	\$242,767	28%
2021	\$972,802	\$287,067	30%
2020	\$938,667	\$289,861	31%
2019	\$912,881	\$201,001	22%
2018	\$850,408	\$254,653	30%

As of 12/31/22

Market Value: \$12,607,896

Actuarial Value: \$14,648,735

Liabilities: \$19,772,146

Membership:

Active: 78 Inactive: 85

Normal Retirement Formula:

2% of compensation for the first 20 years of service + 1.5% for each additional year of service.

Maximum Benefit: \$1,650 per

month.

Normal Retirement Eligibility:

Age 55 with 5 years of service

Social Security Coverage: Yes

COLA: No COLA

Assumed Rate of Return: 5.50%

Salary: 3.0%



CITY OF POPLAR BLUFF

CITY HALL, 501 VINE STREET POPLAR BLUFF, MISSOURI 63901

November 27, 2023

Robert A. Coleman
Pension Analyst
Joint Committee on Public Employee Retirement

RE: 2058 - Poplar Bluff Police and Fire Pension Plan

Mr. Coleman,

Thank you for your phone call on November 15, 2023 regarding the status of the above referenced pension plan. As City Manager, I have met with the board of the Police and Fire Pension Plan along with their local financial advisor. In an effort to correct the funding deficiencies of the Plan, the 2024 City of Poplar Bluff budget will include an additional \$50,000 deposit into the plan above prior year deposits. Moving forward, the goal will be to at least maintain this additional contribution above the normal deposit, with plans to increase this amount in coming years.

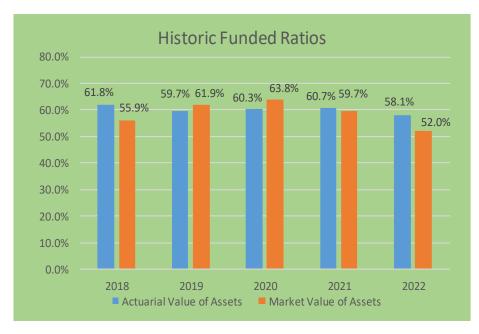
If you have any questions, or need additional information, feel free to contact me at your convenience either by email at mwinters@pbcity.org or by telephone at (573)686-8600.

I hank you

Matt Winters City Manager

RAYTOWN POLICE OFFICERS' RETIREMENT FUND

- Rate of return on investments equaled -14.83% (market) and 4.89% (actuarial) vs. 7.0% assumed.
- Updated mortality tables with the most recent projection scale.
- The actuary writes that "The assets of the Plan experienced a (14.8)% investment return during the 2022 Plan year, producing a loss of almost \$2.5 million. This loss will be smoothed into the actuarial value of assets over five years. The funded status of the Plan deceased to 58.1%."
- Effective with the 1/1/16 valuation, the plan implemented five year smoothing of investment gains and losses. This is designed to reduce volatility of market returns and produce more stability in contribution rates.
- The plan utilizes a closed 30-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/14.
- An employee contribution of 3% of pay was ceased in 2000 when the Plan was 101% funded.
- The Plan was frozen as of December 31, 2013 with members moving to LAGERS.



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2022	\$660,896	\$660,896	100%
2021	\$648,688	\$648,688	100%
2020	\$635,147	\$635,147	100%
2019	\$590,127	\$590,127	100%
2018	\$593,459	\$593,459	100%

As of 1/1/23

 Market Value:
 \$9,308,244

 Actuarial Value:
 \$10,397,125

 Liabilities:
 \$17,883,857

Membership:

Active: 13 Inactive: 68

Normal Retirement Formula:

2.5% of compensation for the first 20 years of service plus 1% for each of the next 10 years of service. Benefits frozen as of 12/31/13.

Normal Retirement Eligibility:

Age 55 with 20 years of service

Social Security Coverage: Yes

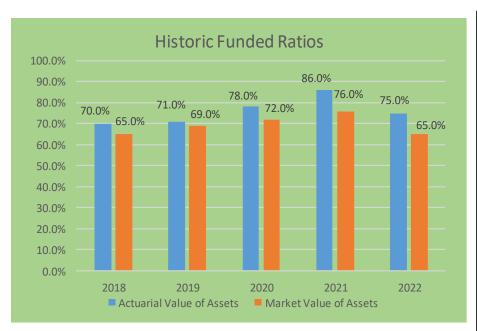
COLA: No COLA

Assumed Rate of Return: 7.0%

Salary: 4%

ST. LOUIS COUNTY EMPLOYEES RETIREMENT PLAN

- Rate of return on investments equaled –16.59% (market) and 8.01% (actuarial) vs. 7.25% assumed.
- Plan A uses Blended 85% PubG-2021, Plan B uses PubS-2010 Scale MP-2021
- The actuary writes that "Effective April 1, 2023, all benefits payable to retirees and surviving spouses who commenced benefits on or after January 1, 2011 but prior to January 1, 2012 were increased by ten percent, and all benefits payable to retirees and surviving spouses who commenced benefits on or after January 1, 2012 but prior to January 1, 2017 were increased by five percent."
- Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of unfavorable experience included an average salary increase of 12.69% which exceeded the 5.00% assumption and more retirements than expected. These losses were offset in part by a gain associated with an investment return of 8.01% (Actuarial Asset Basis) which exceeded the 7.25% assumption.
- The plan utilizes a closed 25-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/2023.
- An employee contribution of 4% is in place for participants hired prior to February 1, 2018.



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2022	\$44,627,335	\$44,627,335	100%
2021	\$46,803,767	\$46,803,767	100%
2020	\$48,635,850	\$48,635,850	100%
2019	\$43,165,955	\$43,173,263	100%
2018	\$44,349,857	\$44,342,552	99.9%

As of 12/31/22

Market Value: \$777,919,248

Actuarial Value: \$893,998,593

Liabilities: \$1,187,383,120

Membership:

Active: 3,620 **Inactive**: 5,838

Normal Retirement Formula:

Civilian: 1.3-1.5% of comp x years of service + \$15 per month x years of service.

Police: 1.4-1.6 x years of service x + \$30 per month x years of service to age 65 then \$5 per month x years of service.

Normal Retirement Eligibility:

Civilian: Before 2/1/18 Age 65 w/ 3 years of service. Rule of 80. After 2/1/2018 Age 67 w/ 3 years of service. Rule of 85

Police: Before 2/1/18 Age 60 w/ 10 years of service. Age 65 w/ 3 years of service. Rule 80. After 2/1/18 Rule 85.

Social Security Coverage: Yes

COLA: Ad HOC

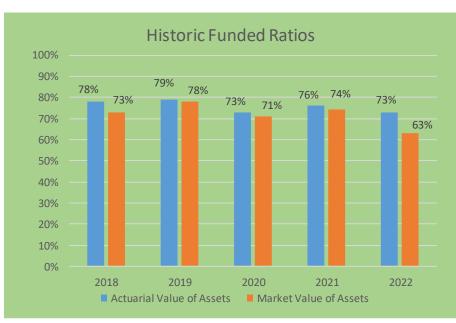
Rate of Return: 7.25%

Salary: Police 3.25%

Civilian 3.75%

St. Louis Public School Retirement System

- Rate of return on investments equaled -10.87% (market) and 3.31% (actuarial) vs. 7.0% assumed.
- Mortality tables used is PubG-2010
- The actuary writes that "The Plan experienced a loss on market value of assets of \$169.2 million due to the rate of return on the market value of fund assets being (10.87)%, which is lower than the assumed rate of return of 7.0%."
- The plan utilizes a closed 15-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/21.
- An employee contribution of 7.5% is in place with a 9% contribution for employees hired after 1/1/2018.
- The number of active members increased from 4,594 to 4,940 for the period. The average service of active members decreased from 8.11 to 7.71, the average age decreased slightly, and the average covered payroll increased by \$1,411 (2.5%).



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2022	\$38,336,585	\$41,034,190	107%
2021	\$37,037,171	\$41,226,981	111%
2020	\$49,622,726	\$41,822,334	84%
2019	\$49,429,863	\$43,902,706	89%
2018	\$47,096,163	\$48,797,779	103%

As of 1/1/23

Market Value: \$817,867,979

Actuarial Value: \$940,664,216

Liabilities: \$1,284,040,175

Membership:

Active: 4,940 **Inactive**: 8,878

Normal Retirement Formula:

2% of compensation x years of service. Hired after 1/1/18 1.75% of compensation x years of credit service. Max Benefit is 60% of final average salary.

Normal Retirement Eligibility:

Age 65 with 5 years of service

Social Security Coverage: Yes

COLA: Ad Hoc

Assumed Rate of Return: 7.0%

Salary: 5%



Public School Retirement System of the City of St. Louis

Office of the Executive Director

November 17, 2023

Dr. Dean Dohrman, Executive Director Joint Committee on Public Employee Retirement State Capitol, Room 219-A Jefferson City, MO 65101

Dear Dr. Dohrman:

Thank you for the opportunity to respond to the inclusion of the Public School Retirement System of the City of St. Louis (PSRSSTL or System) on the annual "Watch List" of the Joint Committee on Public Employee Retirement (JCPER). We would like to offer the following information for the Committee's review.

PSRSSTL was created by the Missouri legislature in 1944 and is organized under Sections 169.410 to 169.540 of the Missouri Revised Statutes. The System provides pension benefits to all personnel employed by the St. Louis Public Schools and Charter Schools operating in the City of St. Louis.

Results from the 2023 Actuarial Valuation Report indicated that the Actuarial Value Funding Ratio remained relatively steady at 73.3%, compared to 73.7% in 2022. However, the Market Value Funding Ratio dropped from 73.7% to 62.7%. This is due to several factors.

The 2022 Investment Return was negative at -10.98% compared to a positive return in 2021 of 12.36%. While the 2022 return was negative, the System's investment performance was in the 20th percentile, performing better than 80% of its peers. PSRSSTL's portfolio is well diversified but the overall 2022 market return was negative in all investment categories, fueled by historic inflation and rising interest rates.

Effective January 2022, the System selected a new Investment Consultant, AndCo. Since then, AndCo has reviewed the System's portfolio and made recommendations to replace some managers who had struggled to meet returns of their peers. They also focused on fees and negotiated lower fees with some of the System's long-time managers.

3641 Olive Street, Suite 300 | St. Louis, MO 63108-3601

Phone: (314) 534-7444 Fax: (314) 533-0531

Another cost cutting measure that the System implemented with recommendation from the Actuary is a reduction in interest rates for the pay out of member contributions from 5% to 2%. This reduced actuarial liabilities by about \$700,000 in the 2023 Valuation. Additionally, the System was able to negotiate a \$0 premium for the three Medicare Advantage Plans that the System offers. This will be in effect from January 1, 2023 through December 31, 2025. While members pay most of the healthcare costs, this will still reduce the System's liabilities since PSRSSTL provides a subsidy for covered members with medical insurance.

One of the most important factors for a well-funded pension plan is the System receiving the full actuarially required contribution necessary to fund the benefits promised to members. In 2017, the Missouri legislature decreased overall contributions to the System while increasing benefits. Employer contributions were capped at 14% in 2018 and will decrease half a percentage point each year until capped at 9% in 2032. Normal retirement was changed from the Rule of 85 to the Rule of 80. Member contributions were increased to 9% for new members and existing members are paying a half percentage point each year until contributions increase to 9% in 2025. However, member contributions are treated as liabilities in Missouri as members can withdraw their contributions with interest upon termination of employment from a member school. This is not legislation that PSRSSTL requested. This cap on contributions puts a much higher pressure on investment returns as the System is unable to make up funding in years with low returns, such as occurred in 2022.

To demonstrate the impact of this legislation on the System, the below compares the amount of statutory employer contributions received versus the actuarial amount for the last few years:

2018	Actuary Amount \$47,096,163	Statutory Amount (Actually Received) \$42,523,785
2019	Actuary Amount \$49,429,863	Statutory Amount (Actually Received) \$40,884,719
2020	Actuary Amount \$49,622,726	Statutory Amount (Actually Received) \$40,946,007
2021	Actuary Amount \$45,259,945	Statutory Amount (Actually Received) \$38,378,143
2022	Actuary Amount \$37,037,171	Statutory Amount (Actually Received) \$36,321,658

As the above chart demonstrates, the System has lost out on a total of \$29,391,556 in employer contributions since 2018.

It is difficult for the System to maintain a satisfactory funding ratio when the System is not receiving the contribution amount required to meet that funding target.

For the last few years, PSSSTL has been working with stakeholders to develop new legislation that would increase the System's employer contributions but also provide more financial certainty for employers. We have had several productive meetings throughout 2022 and 2023 and hope to have legislation ready to introduce in the 2024 legislative session. The goal for the legislation would be to increase the cap of incoming contributions, while also providing funding stability for contributing employers. The current proposal would increase the funding ratio to over 90% by 2032. We ask for the Committee's support when this legislation is introduced.

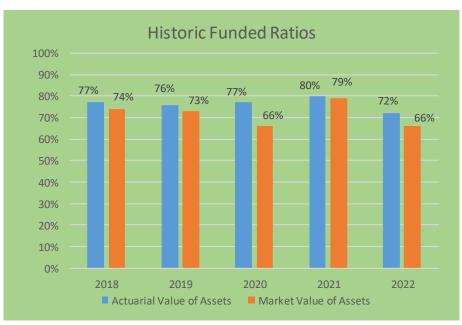
Thank you again for the opportunity to provide information about the Public School Retirement System of the City of St. Louis. If further information is needed, please feel free to contact me via email at skane@psrsstl.org or telephone at 314-533-3883.

Sincerely,

Susan Kane, CEBS Executive Director

University City Police & Fire Retirement Fund

- Rate of return on investments equaled -13.4% (market) and 2.1% (actuarial) vs. 6.5% assumed.
- Mortality tables used is Pub-2010. generational projection Scale MP-2021.
- The actuary writes that "The results of the January 1, 2023 valuation reveal that the plan has an unfunded Accrued Liability of \$11,161,629. The unfunded liability increased from \$7,858,002 as of January 1, 2022 to \$11,161,629 as of January 1, 2023, primarily due to asset experience of the plan."
- The plan utilizes a closed 15-year period for amortization of unfunded actuarial accrued liabilities that began in 2022.
- This is a non-contributory plan for the employees.
- The plan has a loss due to the investment return on the actuarial value of assets (2.1% versus the expected 6.5%).



Year ended 12/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2022	\$2,275,659	\$1,851,726	83%
2021	\$1,712,432	\$1,515,053	88%
2020	\$1,560,137	\$1,444,983	93%
2019	\$1,452,047	\$992,162	68%
2018	\$1,275,970	\$1,003,259	79%

As of 7/1/23

 Market Value:
 \$26,752,457

 Actuarial Value:
 \$29,078,373

 Liabilities:
 \$40,240,002

Membership:

Active: 110 Inactive: 113

Normal Retirement Formula:

65% of compensation for first 25 years + 1% for next 5 years of service. Max: 70% of compensation.

Normal Retirement Eligibility:

Age 50 with 20 years of service

Social Security Coverage: Yes

COLA: Ad Hoc

Assumed Rate of Return: 6.5%

Salary: 3%

